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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,297	01/22/2002	Heinz Walter	740116-358	4774
25570	7590	08/15/2006		
ROBERTS, MLOTKOWSKI & HOBBS P. O. BOX 10064 MCLEAN, VA 22102-8064			EXAMINER WEST, JEFFREY R	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/051,297

Applicant(s)

WALTER ET AL.

Examiner

Jeffrey R. West

Art Unit

2857

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 July 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

## Continuation of 3:

The proposed amendments to claims 1 and 16 specifying that the processor circuit "has an activity time in which the processor circuit is active which is much shorter than the time that the processor circuit remains in the sleep mode" is considered to be a new issue that would require additional search and/or consideration because it requires the definition of an activity time in which the processor circuit is active, rather than only an awake mode, and further raises an issue with use of the relative term "much shorter".

## Continuation of 11:

## Applicant argues:

In the paragraph spanning pages 4 and 5 of the Examiner's Action it is stated that Popp discloses an analog transmission path and a digital transmission path "wherein the digital path includes a microprocessor that is not active during normal measurement operation but only provided to perform corrections." This characterization of the Popp reference is clearly erroneous and based on the Popp reference is clearly erroneous and based on an incorrect interpretation of what is disclosed in this reference... Nothing in this paragraph or elsewhere in this reference is there even the slightest indication that the microprocessor is not active during normal measurement operation. To the contrary, the last sentence of this paragraph indicates that the processor is always operating at low clock frequencies, thereby making it unnecessary to temporarily shift it between an awake mode and a sleep mode in order to reduce power consumption.

The Examiner maintains that Popp's disclosure that "[t]he processing of measuring values for dynamic processes takes place on the analog transmission path only... The processor merely carries out corrective interventions on the analog transmission path" does suggest that the processor is not active during normal measurement operation, but is only active to perform corrections once the pressure has been measured.

## Applicant argues:

Furthermore, what is clear from the Popp disclosure is that the analog path is the primary path and the digital path is always active at the same time as the analog path since "the correction values calculated by the processor circuit are combined with the analog output signal of the sensor after a conversion into analog signals" as set forth in the last clause of the sole claim of the Popp reference. Thus, not only does Popp does not disclose applicant's temporary shifting of the processor from an awake mode to a sleep mode in which the processor is inactive, but it would be inconsistent with Popp's disclosure for the digital path not to be active at the same time as the analog path. Thus, it is clear that there is simply no basis for the Examiner's comments made relative to claims 18 and 19 to the effect that the microprocessor is not active during normal measurement operation.

The Examiner asserts that the claimed limitation specifies that "wherein during normal operation of the electrical transducer, the processor circuit is shifted temporarily from an awake mode into a sleep mode in which the processor circuit is inactive". Turning to the disclosure of Popp in Figure 1 and the corresponding description, Popp indicates that "The processor circuit 7 calculates two digital correction signals for the analog signal corresponding to the differential pressure  $dp$  from the digitized output signals of the sensor 1." This section, along with Figure 1, shows that the processor circuit does not perform any operation until the differential pressure  $dp$  is output from the transducer and therefore Popp does not suggest that the processor needs to be active during normal operation of the electrical transducer, but rather suggests that the processor has no use until the electrical transducer has already sensed the differential pressure  $dp$ .

## Applicant argues:

Thus, a person of ordinary skill viewing the combined teaching of Popp and Zyl, would consider Zyl's alternative technique of adjusting clock speed as the logical modification to apply to Popp since it is related to and compatible with Popp's concept. However, even if Zyl's primary technique of sending the processor into an inactive sleep mode were to be applied to the process and device of Popp, it would not lead to the present invention but rather would result in a transducer having an analog transmission path and a digital path in which the digital path is operated at a low clock frequency during normal operation and only if there is a power deficit, would the processor be shifted into a sleep mode. Moreover, since the processor is operated at a low clock frequency during normal operation in accordance with Popp's teachings, it is unlikely that the processor would need to be shifted into a sleep mode at all (keeping in mind that Zyl's alternative mode in which the clock rate of the processor is reduced requires no sleep mode), and in any case, the time during which the processor would need to be shifted into the sleep mode would most certainly be much shorter than the time during which it is active, the direct opposite of the present invention.

The Examiner asserts that, as noted above, since the processor of Popp operates to calculate corrections based on the differential pressure  $dp$  sensed by the transducer, the processor has no need to be operational while the transducer is undergoing normal sensing operation. Therefore, it would have been obvious to one having ordinary skill in the art to modify the invention of Popp to explicitly disclose that the processor be shifted temporarily from an awake mode into a sleep mode in which the processor is inactive, as taught by Zyl, because the invention of Popp does teach that the microprocessor is inactive during normal transducer operation and Zyl suggests that the combination would have improved the operation of the loop-powered transducer of Popp by complying with the strict power requirement of loop-powered devices (column 2, lines 13-30 and column 4, lines 37-56).